

# DDAS Accident Report

## Accident details

<b>Report date:</b> 06/03/2011	<b>Accident number:</b> 677
<b>Accident time:</b> 07:50	<b>Accident Date:</b> 21/04/2009
<b>Where it occurred:</b> Task: E 397 SABHA 6, Um Al Quttain Village, Almafraq Province	<b>Country:</b> Jordan
<b>Primary cause:</b> Victim inattention (?)	<b>Secondary cause:</b> Unavoidable (?)
<b>Class:</b> Excavation accident	<b>Date of main report:</b> Not recorded
<b>ID original source:</b> None	<b>Name of source:</b> Demining group
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> M14 AP blast	<b>Ground condition:</b> dry/dusty hard
<b>Date record created:</b>	<b>Date last modified:</b> 06/03/2011
<b>No of victims:</b> 1	<b>No of documents:</b> 2

## Map details

<b>Longitude:</b>	<b>Latitude:</b>
<b>Alt. coord. system:</b> Not recorded	<b>Coordinates fixed by:</b>
<b>Map east:</b>	<b>Map north:</b>
<b>Map scale:</b>	<b>Map series:</b>
<b>Map edition:</b>	<b>Map sheet:</b>
<b>Map name:</b>	

## Accident Notes

no independent investigation available (?)  
standing to excavate (?)  
use of rake (?)  
long handtool may have reduced injury (?)

## Accident report

An internal demining group accident report was made available. The conversion into a DDAS file has led to some of the original formatting being lost. Text in square brackets [ ] is editorial.

The internal report is reproduced below, edited for anonymity.

## **INCIDENT INVESTIGATION [Demining group] – MINE ACTION TEAM - JORDAN**

TASK NAME SABHA 6 (397)

GRID REF: [None]. MINEFIELD NO – 397, MINEFIELD TASK ID - E 397 SABHA 6, SECTOR – EAST, PLACE – SABHA, REGION - UM ALQUTTAIN

INVESTIGATION CONDUCTED BY – [Demining group], [Name removed]

DEMINER: [The Victim]. DATE OF BIRTH: 01/07/1962.

SECTION COMMANDER: [Name removed]. TEAM LEADER: [Name removed].

TIME OF INCIDENT: 07:50 AM. DATE OF INCIDENT: 21 APR 2009

NATURE OF INJURY: No Injury. TYPE OF MINE: Anti Personnel M 14

### **IMSMA DETAILED REPORT FOR MINE INCIDENT Tuesday, 21 April 2009**

#### **Part 1 – Description of the incident**

1. Organisation name: [Demining group], JORDAN Team No: Manual Team 3
2. Incident date: 21/04/2009, Time: 07:50 AM
3. Location of incident: EAST SECTOR, Province: ALMAFRAQ, Village: UM AL QUTTAIN, Project or task No: E 397 SABHA 6
4. Name of site manager or team leader: [Name removed].
5. Type of incident: M14 AP MINE, uncontrolled detonation of a mine
6. Device was detonated by: deminer
7. Device detonated while: Raking with Heavy Rake
8. Device was found in an area classified as: a known hazardous area
9. Narrative (Describe how the incident happened. Attach additional pages and photographs or diagrams to assist in clarifying the circumstances surrounding the incident):

While the deminer was working in section No 19 at cluster No 46 using the Heavy Rake he hit an M14 by pressing the pressure plate which activated the mine.

#### **Part 2 – Injuries**

10. Did the incident result in any injuries? No [Minor hand and hearing problems were recorded: see Medic's statement.]
11. List people injured and nature of injury: [None]

#### **Part 3 – Equipment damages**

12. Did the incident result in any damage to equipment or property? No
13. List any mine action equipment or property damage [None]
14. List damage to equipment or property owned by a member of the public or the government. [None]

#### **Part 4 – Explosive hazard**

15. Provide details of mines/UXO/ other devices that were involved in the incident.

Device Type:                      Method:                      Determined by:

AP (Blast) Mine                  Buried                  RAKING

16. State specific device (if known): Anti-Personal Mine 01, M 14 AP MINE

17. Comments (include measurements of any crater resulting from the explosion):

Crater Depth: approx. 15 cm / Width: approx. 40 cm

**Part 5 - Site conditions**

18. Describe the conditions at the site at time of the incident

Ground/Terrain: Hard, flat

Weather: Clear

Vegetation: Heavy, Bush



[The accident site, without "heavy bush".]

**Part 6 – Team and task details**

20. Qualifications of Member(s) involved in the incident:

Name	Position in Location	Occupation
[The Victim]	Deminer	Manual Team 3

21. How long had this team been?

- a. At this site? 1 month
- b. working on this task? 9 months
- c. working on the day? 50 minutes

22. Detector type: N/A. Tripwire feeler used? No

23. Hand tool: HEAVY RAKE

24. PPE: Vest, Visor, [Blast boots]

25. Comments: [None]

**Part 7 - Medical & First Aid**

Medical treatment required? No [Minor hand and hearing problems were recorded: see Medic's statement.]

26. Medical Support at Incident Site: Medic, 1st Aid Kit, Stretcher, Ambulance, Safety Vehicle, Radio to call forward medic

27. Was a Mine Incident Drill carried out? Yes

28. Time and distance data

a. Time from incident to SECTION MEDICAL POINT: (01) minutes

b. Time spent at site administering treatment: 14 minutes

c. Time from evacuation FROM to arrival King Abdullah Hospital: 1 hour

### **Part 8 – Reporting procedures**

Reported by: [Name removed], [Demining group] Amman Office to: [Demining group] Offices & NCDR

Investigation conducted by: [Name removed], [Name removed]

Report compiled/translated by: [Name removed], [Name removed]

Verified by: [Name removed], [Name removed]

### **Observations and Recommendations**

According to the preliminary investigation the incident happened due to individual mistake while the deminer trying to recover an invisible mine and to prevent like incident in the future all invisible Mines would be investigated using the metal detector.

Signed: Operations Coordinator, 21 April 2009

### **Attachments:**

Statements by Injured Members

Statements by Witnesses

Photographs of Incident Site

Copy of Incident Report

### **Victim Report**

**Victim number:** 860

**Name:** [Name removed]

**Age:** 46

**Gender:** Male

**Status:** deminer

**Fit for work:** yes

**Compensation:** Not made available

**Time to hospital:** 75 minutes

**Protection issued:** Frontal apron

**Protection used:** Frontal apron, Mask vsor, blast boots

Mask Visor

blast boots

### **Summary of injuries:**

INJURIES: minor Hand, minor Hearing

COMMENT: See Medic's statement. No Medical report was made available.

## **Statements**

### **Statement 1: the Victim**

I was in section 19 from Sabha 6 clearing a 3 o'clock mine, I was using the light rake searching for the mine following all the instructions, but the area had lots of bushes then I had to use the heavy rake when the accident happened.

Answers to Investigator Questions:

Yes, I took a safety brief before starting the work.

No, I haven't got a weed cutter.

Yes, if I had the cutter it would have been easier to work with the light rake.

### **Statement 2: Team leader & Section Commander**

I started working as a team leader that day replacing [Name removed] who was in a vacation, I gave the team the morning safety brief before the work started and I distributed every deminer to his working site, while I was working as a team leader and a section commander at the same time I checked the work of the injured deminer, he was working on the missing mines so I gave him some instructions and went to another deminer to check on his work, after 20 steps from leaving that de-miner [the Victim] I heard a sound of explosion I looked behind and found that the accident happened with the deminer I just left his site, I informed the medic team and the sector coordinator, who was near to the accident site then we evacuated the injured deminer who was in a good condition to the hospital and we stopped the work.

Answers to Investigator Questions:

Yes, I was informed from the team leader [Name removed] that a group of

ADP team is going to search for missing mines at the site.

Yes, I informed the sector coordinator about my responsibility area and that the original team leader asked for an ADP team to work there.

Yes, the sector coordinator informed me to work with the rake since the deminer didn't have a work.

### **Statement 3: Witness Deminer**

I was working at the same area near the injured deminer, I heard a sound of explosion and turned to see that this explosion happened at the deminer [the Victim] site, the team leader and sector coordinator were near his site, I went there and we evacuated him, he was in a good condition and got out of the site walking.

Answers to Investigator Questions:

Yes, we were working on clearing missing mines.

Yes, we were using the rake.

Yes, I worked on clearing missing mines using the metal detector after finding it by the ADP team.

Yes, I have a weed cutter to use it when necessary.

Yes, we took a safety brief from the sector coordinator and team leader before we started working.

#### **Statement 4: Medic**

At 7:50 am we were informed about a mine explosion from [Name removed], we moved immediately to the accident site and found the deminer [the Victim] with the sector coordinator [Name removed] and he was in a good condition, we checked on him, he had some scratches in his right hand and he wasn't hearing right so we evacuated him to the hospital.

#### **Analysis**

The primary cause of this accident is listed as "*Victim Inattention*" because it seems that the deminer should have used a metal-detector procedure instead of the raking procedure when searching for mines "missing" from the anticipated pattern. Generally, more experienced deminers are used in this role so it is presumed that the deminer would have known that he was working in the wrong way. The secondary cause is listed as "Unavoidable" because it is possible that the Victim was working as directed when the accident occurred.

This record included errors and data apparently copied from a previous report. The most important error was the recording of "no injuries" when the Medic stated that there were minor injuries and the Victim was taken to hospital.

The demining group who made this report available is thanked for its transparency and its professional concern to share lessons that can be learned from accidents. This record, along with several other records where rakes were used, provide compelling evidence that the controlled use of rakes can be both effective and tolerably safe (reducing risk of severe injury to tolerable levels).